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INFINIBAND ASSOCIATION OF END-TO-END CONTEXT VIA RELIABLE DATAGRAM DOMAINS

A method for associating reliable datagram queue pairs with an underlying end-to-end context of a channel adapter is provided. The method comprises storing a reliable datagram domain (RDD) within the context of a reliable datagram queue pair (RD QP). The same RDD is stored within an end-to-end context (EEC). A partitioning key (P_key) is also stored within the EEC. The RDD cannot be accessed by consumer processes. In the case of incoming messages, the P_keys of the incoming data packet and EEC are compared. If P_keys match, then the RDD's of the RD QP and EEC are compared. If the RDD's match, the packet is processed normally. In the case of outgoing messages, the RDD's of the RD QP and EEC are first compared, and if they match, the P_Key of the EEC is inserted into the transport header of the data packet.